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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/977,487	10/16/2001	Hiroyuki Matsuo	50023-156	1520

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07/28/2004

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EXAMINER

AWAD, AMR A

ART UNIT PAPER NUMBER

2675

DATE MAILED: 07/28/2004

[Handwritten mark]

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/977,487

Applicant(s)

MATSUO ET AL.

Examiner

Amr Awad

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If the period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The Examiner has considered the reference cited in the information disclosure statement filed May 17, 2002; see attached PTO-1449.

Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Objections

4. Claims 23 and 28 are objected to because of the following informalities: Claim 23 recites, "the digitizer function", which lacks antecedent basis. It should be changed to --a digitizer function--. Claim 28 recites "the ID number" which lacks antecedent basis. Examiner suggests that the claim should depend on claim 27, which includes the limitation ID number. Appropriate correction is required.

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5. Claim 40 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claims 36-39. See MPEP § 608.01(n). Accordingly, the claims 40-36, 40-37, 40-38 and 40-39 not been further treated on the merits.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 33 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim recites, "the other electronic paper" in line 8, which lacks antecedent basis that render the claim indefinite.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-6 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Jacobson (US Patent NO. 6,124,851).

As to independent claim 1, Jacobson (figures 1A, 1B and 2) teaches an electronic paper file (book 10) composed of an electronic paper (20) of a flexible display medium (100, col. 3, lines 33-40 shows that the displays are made from paper like

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substrates having paper like quality including manipulability) and a cover (140) to which a plurality of electronic papers can be attached (col. 3, lines 20-31), which comprising: first storage means (memory 50 in col. 1, lines 48-49) for storing display-data to be displayed on the electronic paper (col. 1, lines 51-54); page selecting means for selecting a desired page (col. 54-58); and first display control means (drivers 50) for obtaining from the first storage means (memory 50) the display-data corresponding to the desired page selected by the page selecting means and displaying said data on the electronic paper (col. 2, lines 47-58).

As to claim 2, Jacobson shows in figure 11A, a number-of-pages recognizing means for recognizing the number of the electronic papers attached to the cover (col. 8, lines 38-53).

As to claim 3, Jacobson shows that the first display control means displays the display-data corresponding to the desired page selected by the page selecting means and the display-data corresponding to the other pages consecutive to the display-data on a plurality of electronic papers respectively (col. 1, line 40-47 and col. 8, lines 38-48).

As to claim 4, Jacobson teaches that the electronic paper can be attached or detached to or from the cover by providing one of a pair of connecting terminals on one end of the display unit of the electronic paper and the other on the cover, said connecting terminals comprising of the physical and electric connecting function (for that, Jacobson shows that the multiple page (100) are connected together by a spiral (130), and that the multiple pages are combined together through aperture to bind the

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pages , which means that the pages can be attached and detached) (col. 8, lines 38-60).

As to claim 5, the arrangement order of the other connecting terminals on the cover is fixed (the spine (130) would be considered as the other side, which as can be seen in figures 2 and 11A fixed to the cover (140).

As to claim 6, Jacobson teaches a connecting unit (spine 130) on the cover in which a plurality of movable axis parts are disposed in the direction of the axis so as to be rotatable freely, said plurality of movable axis parts comprising the other connecting terminals.

As to claim 23, Jacobson shows that the display unit comprises a digitizer function (for that, Jacobson shows that the device accepts data from an electronic pen or stylus) (col. 2, lines 54-57).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 33-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobson.

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As to claim 33, Jacobson (figures 1A, 1B and 2) teaches an electronic paper file (book 10) composed of an electronic paper (20) of a flexible display medium (100, col. 3, lines 33-40 shows that the displays are made from paper like substrates having paper like quality including manipulability) and a cover (140) to which a plurality of electronic papers can be attached (col. 3, lines 20-31), which comprising: first storage means (memory 50 in col. 1, lines 48-49) for storing display-data to be displayed on the electronic paper (col. 1, lines 51-54); page selecting means for selecting a desired page (col. 54-58); and first display control means (drivers 50) for obtaining from the first storage means (memory 50) the display-data corresponding to the desired page selected by the page selecting means and displaying said data on the electronic paper (col. 2, lines 47-58). Jacobson teaches that the display device is a liquid crystal display (col. 56-60), which means that the device includes a light control means.

Jacobson does not expressly teach editing means for editing the display data corresponding to the selected position or area and updating the display data relevant to the editing and displayed.

However, Jacobson teaches that the information is entered to the device by writing the information from another source such as an electronic pen or stylus or typing (col. 1, lines 56-58 and col. 2, lines 55-58).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to realize that Jacobson's device includes editing means because the typing or stylus input always includes editing capability to edit the input so as to increase the reliability and versatility of the device.

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As to claim 34, Jacobson teaches that the display-data is stored in storage means (memory) provided on each electronic paper (col. 2, lines 52-66).

As to claim 35, Jacobson teaches that the display-data comprises character data and image data, and the storage means manages the character data and the image data so as to be able to edit respective data separately (col. 2, lines 58-65).

As to claims 36-33, 36-34, 37-33, 37-34, 38-33, 38-34, 39-33 and 39-34 Jacobson teaches that the editing is to delete the display-data corresponding to the selected area, and the editing means moves the display-data placed at the rear of the deleted display-data toward the area on which the deleted display-data has been displayed (editing and deleting data is inherent in a device uses typing or stylus to enter data).

As to claims 40-33, 40-34 and 41 Jacobson teaches that the electronic paper is attachable or detachable to or from the cover (for that, Jacobson shows that the multiple page (100) are connected together by a spiral (130), and that the multiple pages are combined together through aperture to bind the pages, which means that the pages can be attached and detached) (col. 8, lines 38-60).

As to claim 42, Jacobson teaches that the arrangement order of the other connecting terminals on the cover is fixed (the spine (130) would be considered as the other side, which as can be seen in figures 2 and 11A fixed to the cover (140).

As to claim 43, Jacobson teaches a connecting unit (spine 130) on the cover in which a plurality of movable axis parts are disposed in the direction of axis so as to be

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rotatable freely, said plurality of movable axis parts comprising the other connecting terminals (figures 1A, 1B and 2).

10. Claims 7-22 and 44-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobson in view of Reid-Green (US patent NO. 5,869,789).

As can be seen above, Jacobson generally teaches an electronic paper device, which can be used as an electronic book of multiple pages. Jacobson also teaches binding the multiple pages using spine (130). Jacobson however does not expressly show having detecting means for detecting whether the electronic paper is attached or detached. Note that Jacobson shows that the pages connected to the binding device (as shown in figures 11A) are connected to the driving device which implicitly teach that the pages are detected simply by reading the data from the memory to the driver by having the pages attached to the device.

However, Reid-Green (figure 2) teaches a digitizer system having a page recognition system (abstract), wherein the digitizer capable of automatically detecting a page identifier for a sheet of paper mounted thereon and further capable of recording all annotations and corrections in an electronic file associated with the sheet of paper on which the corrections and annotations are made (col. 2, lines 15-20).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the teaching of Reid-Green having a page detecting means to be included to Jacobson's device so as motivated by Reid-Green, to

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be able to record all annotations and corrections in an electronic file associated with the sheet of paper on which corrections and annotations are made (col. 2, lines 7-12).

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yang et al. (US patent NO. 6,154,190) teaches a dynamic drive methods and apparatus for bistable liquid crystal display with a paper-like display.

Simoni et al. (US patent NO. 6,573,880) teaches applications for electronic reusable paper.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amr Awad whose telephone number is (703)308-8485. The examiner can normally be reached on Monday through Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on (703)305-4713. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Amr Ahmad Anwar
2-23-2004
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